

Application No.: 10/702320
Docket No.: CL1665USNA

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Amendments to Specification

Please replace the paragraph beginning on page 49, starting at line 13 with the following paragraph:

—The microparticle of Example 1 is about 40 micrometers in diameter and has an index of refraction about 1.9 at a wavelength of about 775 nanometers. As is known in the art, light scattered at the resonant wavelengths emanates from the interior of the particle and must thus be transmitted through the outer optical region of the particle prior to being scattered. Therefore, the outer optical region of the particle (that part of the core outside the caustic surface) must be substantially transparent at the wavelengths of interest. In the following discussion, reference is made to Figures 3 and 4. The microparticle is held in aqueous suspension in an optical cell ~~014~~ constructed of Delrin® and Teflon® AF 2400. Teflon® AF 2400 is a preferred material because it has refractive index closely matching that of water, thus reducing the optical background and associated noise due to reflection and refraction at the interfaces between water and the cell windows. ~~Teflon® AF 1000~~ Teflon® AF 1600 has an index of refraction even closer to water than Teflon® AF 2400, and is another preferred material. Another preferred material is fluoroacrylate, commonly used in photoresist materials, which has a refractive index of about 1.38 at the wavelengths of interest. One practiced in the art would recognize that other optical cell configurations would be possible, provided the design and materials are such that incident light efficiently illuminates the particle or particles, scattered light is minimized, and the cell dimensions are compatible with the intended applications of the invention.—